

CLAIMS:

Claims 1 - 9 (Cancelled)

10. (Previously Presented) A method for determining the position of an object in a system comprising a sensor arranged at a determinable location, the method comprising:
- obtaining a time of arrival for a signal received at the sensor
 - calculating a slant range from the object to the sensor based, at least in part, upon the obtained time of arrival;
 - wherein calculating the slant range further comprises:
 - adding a known distribution of noise to the time of arrival; prior to calculating the slant range; and
 - determining a position vector based, at least in part, upon the calculated slant range and the location of the sensor.
11. (Original) The method of claim 10 wherein the time of arrival is obtained from a signal transmitted from the object.
12. (Original) The method of claim 10 wherein the time of arrival is obtained from a signal reflected from the object.
13. (Cancelled).
14. (Previously Presented) The method of claim 10 wherein the known distribution of noise comprises a Gaussian noise distribution with a variance of σ^2 .
15. (Original) The method of claim 10 wherein determining a position vector further comprises:
- calculating an error norm for each possible position vector solution; and

selecting as the object position vector the position vector solution with the smallest error norm.

Claims 16-19. (Cancelled)